

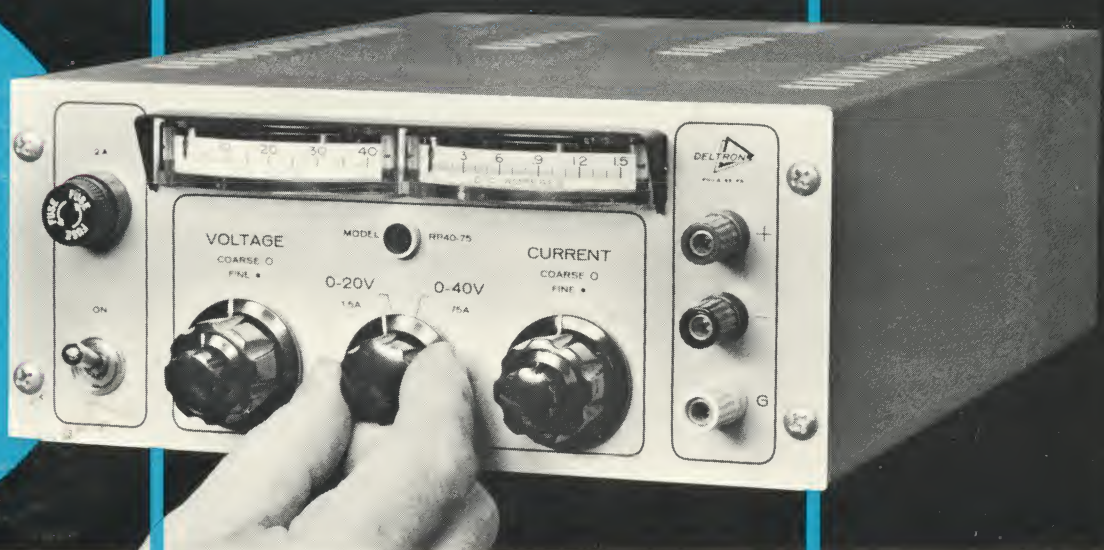
THE
Deltron

HIGH PRECISION



"DUET"

*twin amplifier
controls voltage or
current
with automatic
crossover*



remarkable new

RP SERIES

POWER SUPPLIES

- All-silicon high power models
- Hybrid models for maximum economy

Deltron brings you the remarkable new RP Series high precision power supplies that feature the "DUET" twin amplifier which controls voltage or current with automatic crossover to either mode.

We invite you to compare these power supplies with any others on the market . . . feature for feature . . . and cost. We also invite you to ask for a free demonstration of any one of the RP Series power supplies. You will find the "DUET" RP Series superior in PERFORMANCE . . . QUALITY . . . and PRICE . . . to any others available today.



table 1 . . . DUAL RANGE, HYBRID RP MODELS FOR MAXIMUM ECONOMY

MODEL	DC OUTPUT RANGE		OUTPUT IMPEDANCE (Ohms)			REMOTE PROGRAMMING		PANEL HEIGHT (inches)	PRICE
	Volts	Amps	DC-1Kc	1Kc-100Kc	100Kc-1Mc	Ohms/Volt	Ohms/Amp		
RP 20-1.5	0-10 0-20	0-3 0-1.5	0.005	0.05	0.5	2000	667 1333	3½	\$168.
RP 30-1	0-16 0-32	0-2 0-1	0.008	0.08	0.8	1250	1000 2000	3½	\$168.
RP 40-0.75	0-20 0-40	0-1.5 0-0.75	0.01	0.1	1.0	1000	1333 2667	3½	\$168.
RP 50-0.6	0-25 0-50	0-1.2 0-0.6	0.015	0.15	1.5	800	1667 3333	3½	\$176.
RP 60-0.5	0-32 0-64	0-1 0-0.5	0.02	0.2	2	625	2000 4000	3½	\$176.
RP 100-0.3	0-50 0-100	0-0.6 0-0.3	0.03	0.3	3	400	3333 6667	3½	\$199.

table 2 . . . ALL-SILICON . . . HIGH POWER RP MODELS

MODEL	DC OUTPUT RANGE		OUTPUT IMPEDANCE (Ohms)			REMOTE PROGRAMMING		PANEL HEIGHT (inches)	PRICE
	Volts	Amps	DC-1Kc	1Kc-100Kc	100Kc-1Mc	Ohms/Volt	Ohms/Amp		
RP 20-3	0-20	0-3	0.003	0.03	0.3	2000	667	3½	\$230.
RP 20-5	0-20	0-5	0.002	0.02	0.2	2000	400	5¼	\$299.
RP 30-2	0-32	0-2	0.005	0.05	0.5	1250	1000	3½	\$230.
RP 40-1.5	0-40	0-1.5	0.008	0.08	0.8	1000	1333	3½	\$230.
RP 40-2.5	0-40	0-2.5	0.005	0.05	0.5	1000	800	5¼	\$299.
RP 40-5	0-40	0-5	0.003	0.03	0.3	1000	400	7	\$349.
RP 50-1.2	0-50	0-1.2	0.01	0.1	1	800	1667	3½	\$242.
RP 60-1	0-64	0-1	0.015	0.15	1.5	625	2000	3½	\$242.
RP 60-2.5	0-64	0-2.5	0.006	0.06	0.6	625	800	7	\$379.
RP 100-0.6	0-100	0-0.6	0.02	0.2	2	400	3333	3½	\$278.

SPECIFICATIONS

...model RP series

TYPE	Constant voltage/constant current by automatic crossover	
OUTPUTS	See Tables 1 and 2 (preceding page)	
INPUT	105-125 VAC 50-400 cps. 210-250 VAC optional	
LOAD REGULATION	Constant voltage	Less than 0.01 % or 2 mv
	Constant current	Less than 0.05 % or 500 μ a
LINE REGULATION	Constant voltage	Less than 0.01 % or 2 mv
	Constant current	Less than 0.05 % or 250 μ a
RIPPLE & NOISE	Constant voltage	Less than 200 μ v
	Constant current	Less than 250 μ a
RECOVERY TIME	Less than 50 microseconds	
OUTPUT IMPEDANCE	See Table 1 & Table 2	
STABILITY	Constant voltage	Less than 0.02 % or 10 mv
	Constant current	Less than 0.1 % or 1 ma
TEMPERATURE COEFFICIENT	Constant voltage	Less than 0.03 % or 2 mv/ $^{\circ}$ C
	Constant current	Less than 0.08 % or 500 μ a/ $^{\circ}$ C
RESOLUTION	Constant voltage	Better than 0.005 %
	Constant current	Better than 0.005 %
TEMPERATURE RANGE	0-50 $^{\circ}$ C	
OVERLOAD & SHORT CIRCUIT	Automatic crossover from constant voltage to constant current provides complete protection for any overload condition	
REMOTE PROGRAMMING	See Table 1 & Table 2	
METERS	2 % accurate, large scale edge type meters furnished on all models	
CONTROLS	Power, output range, coarse & fine concentric controls for voltage and current	
SIZE	Width 8 $\frac{1}{4}$ "; Depth 13 $\frac{1}{2}$ "; Height 3 $\frac{1}{2}$ ", 5 $\frac{1}{4}$ ", 7" . . . depending on model. See Table 1 & Table 2	
WEIGHT	Dual range models—12 $\frac{1}{2}$ lbs. 3 $\frac{1}{2}$ " Single range models—15 lbs. 5 $\frac{1}{4}$ " Single range models—22 lbs. 7" Single range models—28 lbs.	

FEATURES

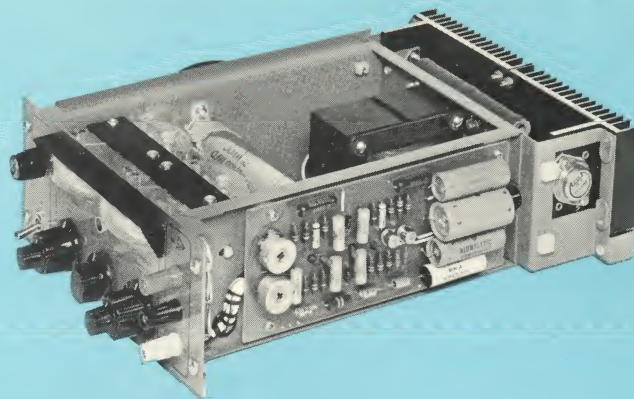
of RP Series Power Supplies

1. DUET* twin amplifier control system permits continuous control of voltage or current with automatic electronic crossover to either mode of operation.
2. Dual Output Range (on dual range units only).
3. Front and rear output terminals.
4. Floating output—either positive or negative output terminal may be grounded to the separate ground terminal provided or may be floated up to 300 volts above ground.
5. No overshoot on turn-on, turn-off, or power interruption in either voltage or current mode.
6. Automatic Sensing — if the front terminals are used, DC output is sensed at the front terminals. If the rear terminals are used, DC output is sensed at rear terminals. This is accomplished automatically thus assuring optimum regulation at the terminals selected for load connection.
7. Remote Sensing — separate sensing terminals regulate the output directly at the load, compensating for voltage drops in the load feeder lines.
8. Remote Programming — voltage and current output are remotely programmable. See tables 1 & 2 for program constants.
9. Automatic Series Operation — units may be connected in series up to 300 volts without any complicated connections to special terminals. This results in a power source of greater voltage having the same voltage-to-current crossover property of the individual units.
10. Automatic Parallel Operation — any number of units can be connected in parallel without any complicated connections to special terminals. This results in a power source of greater current capability, having the same voltage-to-current crossover property of the individual units.
11. High resolution concentric coarse and fine voltage and current controls. Dual wire wound potentiometers for voltage and current control have 20 ppm temperature coefficient so that temperature and stability specifications are achieved without the use of precision external programming resistors. All specifications are met with internal controls.

Continued on next page

12. Convection cooled — no moving parts. Efficient heat transfer design.
13. Advanced SEE-SAW* circuit for power control reduces transistor dissipation without the use of troublesome SCR's.
14. Silicon transistor differential amplifiers for voltage and current loops, with a stabilized zener reference in a novel impedance cancelling circuit.
15. Electronic crossover provides automatic transfer from voltage-to-current regulation at any operating point, or automatic transfer from current-to-voltage regulation at any selected operating point.
16. Constant voltage regulation with continuously adjustable current limiting or constant current regulation with continuously adjustable voltage limiting.
17. Advanced half rack mechanical packaging for portable use, or rack application, as duals, or single units (see column at right for details).
18. Highest quality components throughout . . . advanced styling . . . outstanding reliability . . . glass epoxy printed circuit boards . . . funnel eyeleted at stress points . . . gold plated printed circuit wiring . . . computer grade electrolytic capacitors . . . cable and harness construction . . . plus many other quality features.
19. Voltage regulated from true zero to 100% of maximum rated output.
20. Current regulated from 0.1% to 100% of maximum rated current.
21. Separate 2% accurate, large scale voltage and current meters.
22. Human engineered for easy operation.
23. Unconditional guarantee.

*Tradename of Deltron, Inc.



View of Model RP 40-75 with cover removed. Request a demonstration and examine for yourself the superior design, workmanship, and components in the Deltron "Duet".

OPTIONAL LOW COST MOUNTING ADAPTERS

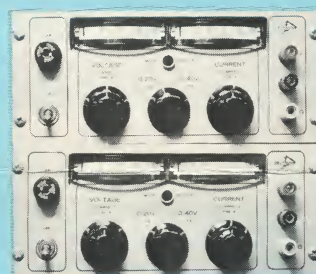
The low cost adapters shown below are available for single or dual side-by-side rack mounting, or for dual portable mounting (one unit stacked on top of another). • PRICE: \$15.00 each for R-1 and R-2 units, \$25.00 each for P-1 units. If P-1 unit is factory installed, unit price is \$10.00 since credit is given for single case covers. • Specify panel height when ordering adapters.



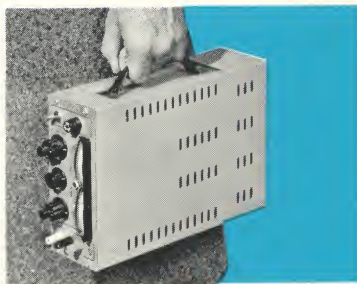
ADAPTER R-1 (single rack)



ADAPTER R-2 (dual rack)



ADAPTER P-1 (dual portable)



Built-in handle makes it easy to carry the Deltron "Duet". It's about half the size of an average briefcase.

FOR MORE INFORMATION . . . OR TO ARRANGE A DEMONSTRATION . . . contact your nearest Deltron technical sales representative . . . or write or call DELTRON direct.

Deltron inc.

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